

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
25 October 2001 (25.10.2001)

PCT

(10) International Publication Number
WO 01/80482 A1

- (51) International Patent Classification⁷: **H04L 9/32**
- (21) International Application Number: **PCT/KR00/00875**
- (22) International Filing Date: **9 August 2000 (09.08.2000)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
2000/19727 **14 April 2000 (14.04.2000)** **KR**
- (71) Applicant (for all designated States except US): **SECUBE CO., LTD.** [KR/KR]; 18, Kumi-dong, Pundang-ku, Sungnam-shi, Kyongki-do 463-500 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **EUN, You-Jin**

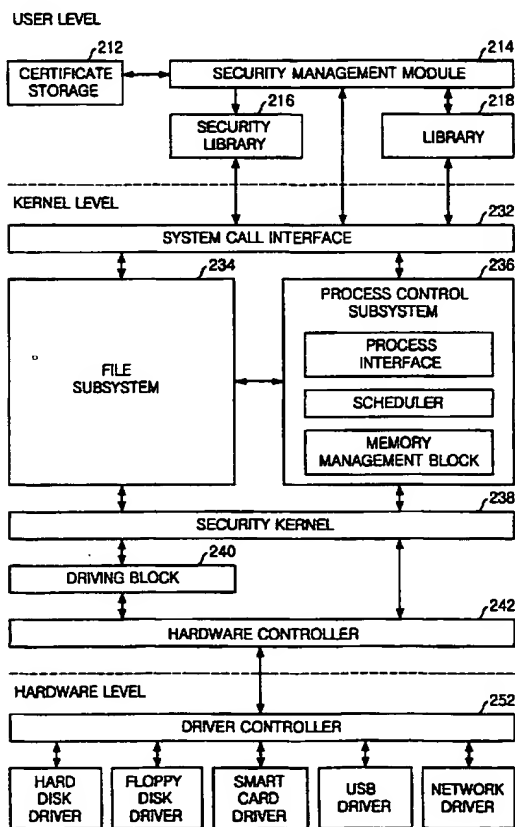
[KR/KR]; #104-1801 Hanil Town Apt. 881 Jowon-dong, Jangan-ku, Suwon-shi, Kyongki-do 440-200 (KR). **HONG, Ki-Yoong** [KR/KR]; #505-104 Mujigae Maeul 221 Gumi-dong, Pundang-ku, Sungnam-shi, Kyongki-do 463-500 (KR). **LEE, Min-Goo** [KR/KR]; #106-403 Pungnim Apt. 447 Sangha-ri, Gusung-myun, Yongin-shi, Kyongki-do 449-910 (KR). **KIM, Jae-Myung** [KR/KR]; 9-5 Hwayang-dong, Kwangjin-ku, Seoul 143-130 (KR).

(74) Agents: **CHOI, Jong-Sik** et al.; Haecheon Bldg., 741-40 Yeoksam 1-dong, Kangnam-ku, Seoul 135-081 (KR).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

[Continued on next page]

(54) Title: **METHOD AND APPARATUS FOR PROTECTING FILE SYSTEM BASED ON DIGITAL SIGNATURE CERTIFICATE**



(57) Abstract: Method and apparatus for protecting file system is disclosed. The method for the protecting file system includes the steps of: a) generating first digital signature keys and a system security manager's certificate for a system security manager; b) storing system security manager's certificate onto a security kernel when installing an operating system on a server computer; c) generating second digital signature keys and user's certificate for a general user; d) setting an access authority of the file system; e) identifying a user through a digital signature authentication method when the user tries to access the file system; and f) giving the user the access authority for the file in accordance with identification result.

WO 01/80482 A1



(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.